AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-28. (Cancelled).

29. (Currently Amended) A laser apparatus for generating laser light to be transmitted through an optical transmission system, comprising:

a laser that emits light that is substantially linearly polarized when in use;

a quarter wave retarder plate that is positioned with respect to the laser so that:

light emitted by the laser is circularly polarized by the wave retarder plate so as to have a predetermined handedness before reaching an optical transmission system; and

light reflected back toward the laser has a linear polarization, after passing through the quarter wave retarder plate a second time, that is orthogonal to the linearly polarized light emitted by the laser; and

a linear polarizer that is positioned between the laser and the quarter wave retarder plate so as to:

permit the linearly polarized light emitted by the laser to pass through the linear polarizer; and

block light reflected back toward the laser by the optical transmission system ~~fiber~~ that has a linear polarization that is orthogonal to the linearly polarized light emitted by the laser.

30. (Previously Presented) The laser apparatus as recited in claim 29, wherein the linear polarizer is disposed adjacent to a surface of the quarter wave retarder plate facing the laser.

31. (Previously Presented) The laser apparatus as recited in claim 29, further comprising a lens that is positioned so that the quarter wave retarder plate is disposed between the lens and the laser.

32. (Previously Presented) The laser apparatus as recited in claim 29, further comprising a lens that is positioned between the quarter wave retarder plate and the laser.

33. (Previously Presented) The laser apparatus as recited in claim 29, further comprising a hermetically sealed housing within which the laser is disposed, the housing having a window through which the light emitted by the laser is transmitted.

34. (Previously Presented) The laser apparatus as recited in claim 33, further comprising a thin film antireflective coating on at least one surface of the window.

35. (Previously Presented) The laser apparatus as recited in claim 33, the quarter wave retarder plate comprising a portion of the hermetically sealed housing.

36. (Previously Presented) The laser apparatus as recited in claim 35, the quarter wave retarder plate comprising the window of the hermetically sealed housing.

37. (Previously Presented) The laser apparatus as recited in claim 35, further comprising a thin film antireflective coating on a surface of the quarter wave retarder plate.

38. (Previously Presented) A laser apparatus for generating laser light to be transmitted through an optical transmission system, comprising:

a laser that emits light that is substantially linearly polarized when in use, the laser having an oscillation mode;

a quarter wave retarder plate that is positioned with respect to the laser so that:

light emitted by the laser is circularly polarized by the wave retarder plate so as to have a predetermined handedness before reaching an optical transmission system; and

light reflected back toward the laser has a linear polarization, after passing through the quarter wave retarder plate a second time, that is orthogonal to the linearly polarized light emitted by the laser;

wherein the laser apparatus does not include any polarizing element positioned between the laser and the quarter wave retarder plate so that light reflected back toward the laser that has a linear polarization that is orthogonal to the linearly polarized light emitted by the laser continues toward the laser unimpeded by any polarizing element but does not couple back onto the oscillation mode of the laser.

39. (Previously Presented) The laser apparatus as recited in claim 38, further comprising a lens that is positioned so that the quarter wave retarder plate is disposed between the lens and the laser.

40. (Previously Presented) The laser apparatus as recited in claim 38, further comprising a lens that is positioned between the quarter wave retarder plate and the laser.

41. (Previously Presented) The laser apparatus as recited in claim 38, further comprising a hermetically sealed housing within which the laser is disposed, the housing having a window through which the light emitted by the laser is transmitted.

42. (Previously Presented) The laser apparatus as recited in claim 41, further comprising a thin film antireflective coating on at least one surface of the window.

43. (Previously Presented) The laser apparatus as recited in claim 41, the quarter wave retarder plate comprising a portion of the hermetically sealed housing.

44. (Previously Presented) The laser apparatus as recited in claim 43, the quarter wave retarder plate comprising the window of the hermetically sealed housing.

45. (Previously Presented) The laser apparatus as recited in claim 43, further comprising a thin film antireflective coating on a surface of the quarter wave retarder plate.

46. (Previously Presented) A light emission and transmission system, comprising:

a laser that emits light that is substantially linearly polarized when in use, the laser having an oscillation mode;

an optical fiber positioned relative to the laser so that at least a majority of the light emitted by the laser is transmitted away from the laser; and

a quarter wave retarder plate positioned with respect to the laser so that:

light emitted by the laser is circularly polarized by the wave retarder plate so as to have a predetermined handedness before reaching the optical fiber; and

light reflected back toward the laser by the optical fiber has a linear polarization, after passing through the quarter wave retarder plate a second time, that is orthogonal to the linearly polarized light emitted by the laser so as to not couple back onto the oscillation mode of the laser.

47. (Previously Presented) A light emission and transmission system as recited in claim 46, further comprising a linear polarizer positioned between the laser and the quarter wave retarder plate so as to:

permit linearly polarized light emitted by the laser to pass therethrough; and

block light reflected back toward the laser by the optical fiber that has a linear polarization that is orthogonal to the linearly polarized light emitted by the laser.

48. (Previously Presented) A light emission and transmission system as recited in claim 47, wherein the linear polarizer is disposed adjacent to a surface of the quarter wave retarder plate facing the laser.

49. (Previously Presented) A light emission and transmission system as recited in claim 46, further comprising a lens positioned between the quarter wave retarder plate and the optical fiber.

50. (Previously Presented) A light emission and transmission system as recited in claim 46, further comprising a lens that is positioned between the quarter wave retarder plate and the laser.

51. (Previously Presented) A light emission and transmission system as recited in claim 46, further comprising a hermetically sealed housing within which the laser is disposed, the housing having a window through which the light emitted by the laser is transmitted.

52. (Previously Presented) A light emission and transmission system as recited in claim 51, further comprising a thin film antireflective coating on at least one surface of the window.

53. (Previously Presented) A light emission and transmission system as recited in claim 51, the quarter wave retarder plate comprising a portion of the hermetically sealed housing.

54. (Previously Presented) A light emission and transmission system as recited in claim 53, the quarter wave retarder plate comprising the window of the hermetically sealed housing.

55. (Previously Presented) A light emission and transmission system as recited in claim 53, further comprising a thin film antireflective coating on a surface of the quarter wave retarder plate.

56. (New) A method for reducing reflections of laser light reflected from the end of an optical discontinuity, the method comprising:

(a) operating a laser to emit light that is substantially linearly polarized when in use, the laser having an oscillation mode;

(b) transmitting the light to an optical discontinuity such that at least a portion of the light is reflected by the optical discontinuity back toward the laser; and

(c) altering the polarization of at least one of the light emitted by the laser or the light reflected by the optical discontinuity so that at least a portion of reflected light is substantially linearly polarized orthogonal to the emitted light so that the reflected light does not couple back onto the oscillation mode of the laser.

57. (New) The method as recited in claim 56, wherein (c) comprises:

converting the linear polarization of emitted light to be circularly polarized with a predetermined handedness before reaching the optical discontinuity.

58. (New) The method as recited in claim 57, wherein (c) further comprises:

causing the reflected light to be linearly polarized such that it is orthogonal to the emitted light.

59. (New) The method as recited in claim 57, wherein (c) further comprises:

passing the emitted light through a quarter wave plate; and

passing the reflected light back through the quarter wave plate.

60. (New) The method as recited in claim 59, wherein the method does not employ any polarizing element positioned between the laser and the quarter wave plate so that light reflected back toward the laser is unimpeded by any polarizing element.

61. (New) The method as recited in claim 59, wherein the method further comprises:

passing the emitted light through a lens that is positioned so that the quarter wave plate is disposed between the lens and the laser.

62. (New) The method as recited in claim 59, wherein the method further comprises:

passing the emitted light through a lens positioned between the quarter wave plate and the laser.

63. (New) The method as recited in claim 56, wherein (a) comprises:

placing a linear polarizer in the path of the emitted light.

64. (New) The method as recited in claim 63, the linear polarizer further blocking the reflected light having a linear polarization that is orthogonal to the linear polarization of the emitted light.

65. (New) The method as recited in claim 63, wherein the method further comprises:

passing the emitted light through a quarter wave plate positioned such that the linear polarizer is in between the laser and the quarter wave plate.

66. (New) The method as recited in claim 65, wherein the linear polarizer is adjacent to a surface of the quarter wave plate.

67. (New) The method as recited in claim 56, wherein the optical discontinuity is an optical fiber.